

Sharing student knowledge in exchange programs

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SUMMARY

The paper presents an initiative in mobility activities at the University of West Hungary, Faculty of Geoinformatics, focusing on student knowledge and experiences, and sharing experiences of two pilots, which were started in VM-BASE project, supported by EU Minerva Programme. One pilot is a preparative course for incoming students using the existing e-learning portal. Joining the preparative course students are able to acquire the most important terms in GIS, surveying and field survey. The course requires collaborative work in a wiki environment. In the other pilot the experiences of the outgoing students are gathered, structured and shared by students in order to be built a guide about the host universities and cities.

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1. INTRODUCTION

At the University of West Hungary Faculty of Geoinformatics two web portals were implemented on MOODLE framework for educational purposes in 2005. The decision to run two portals based on different educational requirements.

One of these portals the EGEO was set up for full-time and part-time graduate students. The portal enables access to the learning materials in digital form for students and provides tools to the everyday teaching for teachers. The students have to perform two consequent steps to reach the course contents. Firstly, they have to register to the education portal and secondly they have to enrol to a specific course.

The second educational portal targeting the postgraduate students is called Virtual GEO portal. The portal besides the e-learning services provides student tracking and registry functions (Bleyerova - Kottyán, 2006). Recently there are different learning opportunities for different target groups on this portal such as:

- UNIGIS distance learning programme in GIS
- Constructional geodesy distance learning programme
- Real estate manager distance learning programme
- Course with elective modules for the members of Hungarian Chamber of Engineers.

The Faculty of Geoinformatics regularly take part in international e-learning projects. Some results of these projects are available on Virtual GEO portal as a course.

In the following chapters the established pilots in this project will be reviewed focusing on the knowledge sharing and collaborative activities between students.

2. MOBILITY AT THE FACULTY OF GEOINFORMATICS

The Faculty of Geoinformatics is an active partner in student and teacher exchange programs. During the last three years the students of the Faculty spent scholarships months at several partner universities which are located in the following countries: Austria, Germany, Poland and Spain. As a host university the Faculty of Geoinformatics was visited by students from the Czech Republic, Poland and Romania. These mobilities were realized in Erasmus and CEEPUS (Central European Exchange Program for University Studies) programs. In these exchange programs the period of study or placement abroad are called mobility (EC, 2008).

There is a growing tendency in the number of mobilities which are available for the universities. Therefore the organization of mobilities claims newer solutions. Besides the existing e-learning tools the collaborative work, the knowledge sharing may help the organizational activity.

3. OVERVIEW OF VM-BASE PROJECT

The VM-BASE project (Virtual Mobility Before and After Student Exchanges) wants to raise the quality of student exchanges by offering virtual support before and after the physical mobility. The virtual mobility complements the existing exchange programmes. The major activity of the project consist of several pilots focusing on the orientation and selection of students, preliminary courses for students preparing for a physical exchange and examination facilities.

The project runs from 1 October 2006 until 30 September 2008 and is funded with support from the European Commission under the Socrates Programme, MINERVA Action.

The participating members of the project:

- EuroPace ivzw (BE)
- Katholieke Universiteit Leuven (BE)
- Coimbra Group ASBL (BE)
- ESU – European Students' Union (BE)
- University of Tartu (EE)
- BEST – Board of European Students of Technology (FR)
- University of West Hungary Faculty of Geoinformatics (HU)
- Helsinki University of Technology (FI)
- Laurea University of Applied Sciences (FI)
- University of Edinburgh (UK)

The Faculty of Geoinformatics started two pilots in the project. One is a preparative course for incoming students the other is an orientation tool for outgoing students.(VM-BASE, 2008)

In the following chapters these pilots (Multilingual Survival Kit in GIS, Virtual Exchange of Student Mobility Experience) will be detailed.

4. MULTILINGUAL SURVIVAL KIT IN GIS

The Multilingual Survival Kit in GIS is a preparative trilingual (English/German/Hungarian) course and consists of special technical terms used in GIS, surveying, and field measurement. The main language of the course is English, but the terms and the description of terms are provided in three different languages.

4.1 Concepts

The course is offered to incoming students who are interested to participate. It prepares students for the technology used during practical and field work at the Faculty of Geoinformatics.

The teachers responsible for practical work and field work collaborate the terms of their interest to keep the quality control of provided information. There is one course tutor who is responsible for regular control of students' activities.

In first instance, the categories, the basic list of terms in each category and the description of each term were created by course developers and teachers.

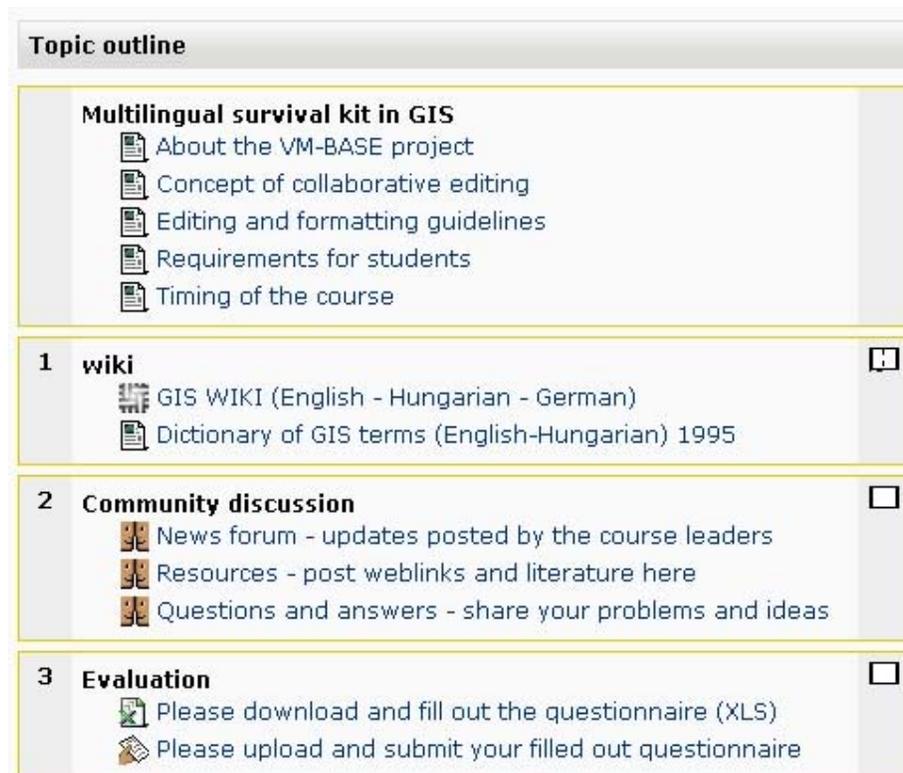
Students work in the course on a collaborative way. Students have the possibility to add interesting links, pictures and results of their work which relates to a given term and also to add new terms and requests for explanation to teachers or other students. (Lucas, 2008)

4.2 Implementation

The Multilingual Survival Kit in GIS is implemented on the Virtual GEO portal.

It contains guidelines about the requirements, timing and collaborative work.

An English-Hungarian GIS dictionary, forums and evaluation questionnaires are included in the course also. (Fig.1.)



The image shows a screenshot of a 'Topic outline' for a course. It is organized into four main sections, each with a title and a list of sub-items. The first section is 'Multilingual survival kit in GIS' and includes five sub-items: 'About the VM-BASE project', 'Concept of collaborative editing', 'Editing and formatting guidelines', 'Requirements for students', and 'Timing of the course'. The second section is '1 wiki' and includes 'GIS WIKI (English - Hungarian - German)' and 'Dictionary of GIS terms (English-Hungarian) 1995'. The third section is '2 Community discussion' and includes 'News forum - updates posted by the course leaders', 'Resources - post weblinks and literature here', and 'Questions and answers - share your problems and ideas'. The fourth section is '3 Evaluation' and includes 'Please download and fill out the questionnaire (XLS)' and 'Please upload and submit your filled out questionnaire'. Each section has a small icon on the right side, and the '1 wiki' and '3 Evaluation' sections have checkboxes.

Fig. 1. Content of the Multilingual Survival Kit (source: <http://www.vgeo.hu>)

The main part of the course is the GIS WIKI. It is created using the built in MOODLE module which based on ErfurtWIKI.

User functions:

- browse contents,
- edit pages using WikiMarkup language,
- add new pages,
- insert pictures, links,
- browse page histories,
- compare, restore or delete different versions of pages. (Virtual GEO, 2008)

4.3 Conclusions

The Multilingual Survival Kit has some evaluation results after the first run. These are the nexts:

- The multilingual aspect was not totally reach, missing cross references between terms.
- The students worked alone on their articles, there was only a little collaboration.
- Copy / paste solutions used for many of the articles written.
- Students mainly focus on technical term which are not of high interest for the lingual aspect because they are the same in English, German and Hungarian.

What to change for the second run:

- Cross references in 3 languages.
- Avoid copy paste solutions.
- Give the directive in order that even if the community is small it can be effective.
- Real development of language skills what ever the level in language is.

5. MOBILITY GUIDE

Virtual Exchange of Student Mobility Experience pilot focusing on outgoing students, organised by the teachers at the Faculty of Geoinformatics.

5.1 Objective

In connection with the organization of the mobilities the experiences of the latter years indicate that the motivating for mobilities and the adequate information are with fundamental importance. For the students pondering over going abroad, the experiences of the former scholarship students may help in order that their exit intention turns into a decision.

Generally the undermentioned questions occur to the hesitating students at this time:

- Why should I take part in exchange programs?
- What kind of opportunities are there?
- Wich partner university should I choose?

In the former practise the scholarship students finishing their mobilities provided text documents with photos or presentation files about their experiences. In these reports little information was given about the spent period because only some topics were dealt with .

However spending of a scholarship period has effect to the whole area of life. During a scholarship period the learning, the living, the environment, the entertainment, the culture, the contacts, several other viewpoints and events form the student experiences.

Gathering, organizing, sharing these experiences may be a more motivating method than the former practise. Based on this idea a new method was developed. (Kottyan, 2007)

5.2 Method

In the realisation of the aims the collaborative, on-line content management appeared suitable. During the mobilities the scholarship students record their experiences to on-line diaries. A diary can contain some private or public data and the categories of data. Using these accumulated data a thematic information set is organized named Mobility Guide. Information related to a partner in the Mobility Guide are regularly refreshed by students who spend a learning period at the partner university. The students may find the suitable answers on this manner onto their questions. (Fig.2.)

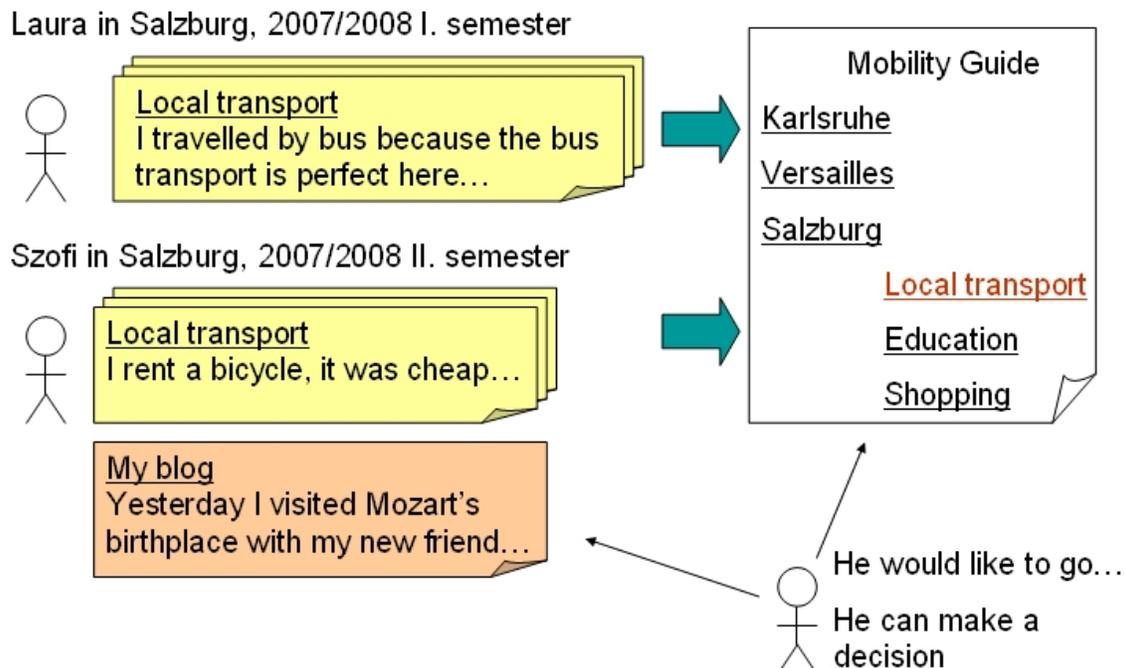


Fig. 2. Concepts (source: Kottyan, 2007)

5.3 Implementation

The Mobility Guide is a part of the new Mobility Portal which was implemented on Drupal content management system. Two essential elements of the Drupal framework were used to create the Guide.

The blog module allows to every registered user in this case every scholarship student to maintain an individual on-line diary. Blogs are made up of individual posts that are time stamped and tagged by students. At present a post can contain texts and pictures on the portal.

The Mobility Guide consists of selected information from diaries using the book module. A book is a set of pages organized into a structure. A book can contain other contents which is set on the portal. Drupal automatically provides links to navigate on pages and a navigation menu can be enabled on the site. (Drupal, 2008)

5.4 Conclusions

The pilot is in the first run however some experiences are formulated as follows:

- Students can use free tagging in order to categorize the blog entries. The first time it is better than determines the tags in advance.
- Students use the portal easily for blogging.

After two semesters it can be decided what kind of changes are necessary on the portal.

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BIOGRAPHICAL NOTES

Laszlo Kottyan has an M.Sc. degree in Information Engineering, specialisation of Software Engineering. From February 2004 he works at the Department of Geoinformation Science, Faculty of Geoinformatics, University of West Hungary. He is an assistant professor. From September 2004 he performs Ph.D. studies, his research project is Decision Support in Land Consolidation.

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